Introduction

1.0

1.1 Background

Kenilworth Avenue is an important national highway providing a link between Interstate 395, Interstate 295, and the Baltimore-Washington Parkway (see Figure 1.1). It serves as a major commuter route, carrying over 100,000 vehicles daily between Washington, DC and its Maryland suburbs.

The corridor, important as it is, has been neglected and is a barrier between adjacent communities, and between communities and the river. It is in need of improvement, including repair and redesign, to support the current and future transportation needs of the area. Current concerns include lack of connectivity with adjacent neighborhoods, poor and unsafe roadway geometry, limited horizontal clearances, inadequate and substandard pedestrian crossings, deteriorated service road conditions, and an overall unappealing visual character.

This study, the third transportation study along the Anacostia River, is a major component of the District of Columbia's Anacostia Waterfront Initiative (AWI). The AWI's primary focus is to revitalize the Anacostia River waterfront and its surrounding neighborhoods, and envisions an energized waterfront that unifies diverse neighborhoods with one of the city's greatest natural assets, the Anacostia River. Major goals of the AWI include revitalization of neglected areas, enhancement and protection of local parks, improvement of water quality, and better accessibility to waterfront destinations.

1.2 Study Area

The Kenilworth Avenue Corridor Study area is located in the northeast and southeast quadrants of Washington, DC (see Figure 1.2). The Avenue lies east of, and roughly parallel to the Anacostia River.

The study area includes the Kenilworth Avenue mainline between Pennsylvania Avenue to the south and the District boundary, at Eastern Avenue, to the north. Access between Pennsylvania Avenue and Kenilworth Avenue are not included since the interchange was studied in a previous study. The ramps connecting Eastern Avenue and Kenilworth Avenue are addressed in this study, which also addresses coordination with the State of Maryland to facilitate improvements to the corridor.

The western boundary of the study area is parallel to the western bank of the Anacostia River, between Pennsylvania Avenue and Benning Road, and approximately one-third of a mile west of Kenilworth Avenue between Benning Road and Eastern Avenue. The eastern boundary follows Minnesota Avenue and extends approximately one-third of a mile east of Kenilworth Avenue.

Also included in this study is a corridor for the potential crossing of the Anacostia River at Massachusetts Avenue, between Reservation 13 at the western bank of the river and Randle Circle to the east.

Communities

Communities along Kenilworth Avenue within the study area include:

- Dupont Park;
- Twinning;
- Greenway;
- Fort Dupont;
- Benning
- River Terrace;
- Mayfair;
- Central Northeast;
- Eastland Gardens;
- Deanwood; and
- Kenilworth.

Hill East on the east end of Capitol Hill, near the proposed Reservation 13 development is also included.

Major Roads

Major roads included in the study area are:

- Kenilworth Avenue;
- Minnesota Avenue;
- Massachusetts Avenue;
- East Capitol Street;
- Benning Road;
- Nannie Helen Burroughs Avenue; and
- Eastern Avenue.

Figure 1.1: Regional Context

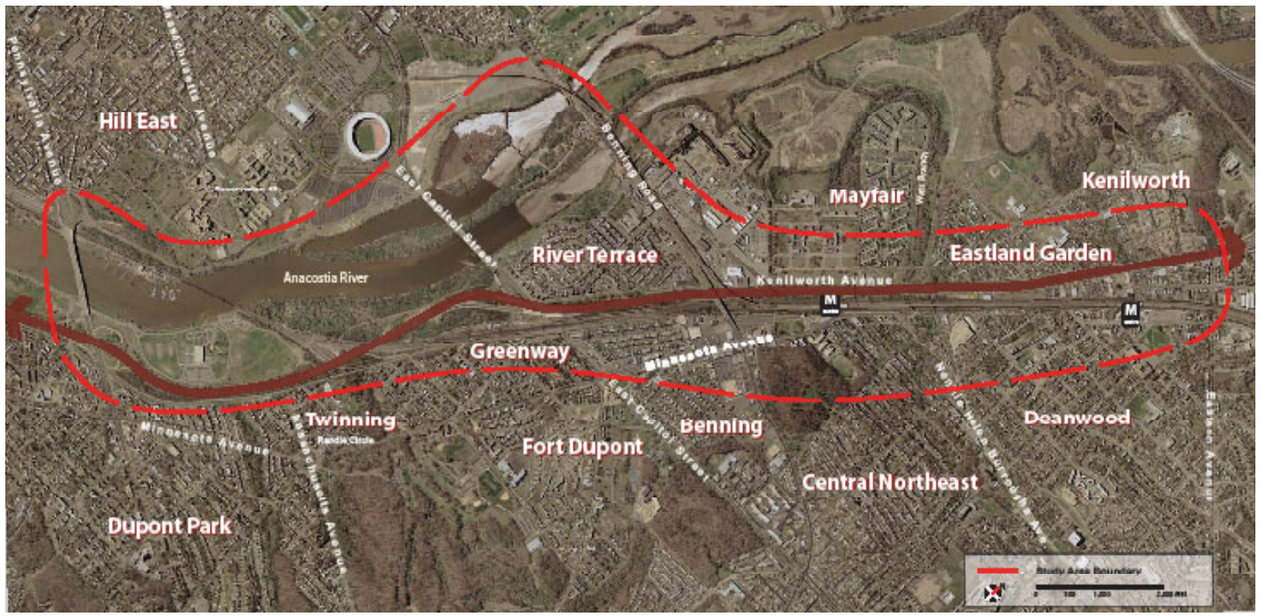


Figure 1.2: Study Area Neighborhoods

1.3 Goals and Objectives

The Kenilworth Avenue corridor within the study area was examined with three overall goals in mind:

- To provide a safer, more pedestrian-friendly, environment;
- To create a more urban setting for Kenilworth Avenue; and
- To improve access to and from local neighborhoods.

To further guide this study, a Vision Statement and specific thematic goals and objectives were developed through coordination with stake-holders, other Anacostia area studies, and meetings with community representatives from the study area.

Vision Statement

Kenilworth Avenue will be transformed into an urban roadway that is more pedestrian friendly and more accessible to the adjoining communities and neighborhoods, and improves community access to public transit, open space, and the Anacostia riverfront. Pedestrians, bicyclists, motorists, and people using public transit will be accommodated within a safer environment. The avenue will be enhanced with reduced visual clutter and improved connections and interchange geometry, enhanced and clearly-identified pedestrian crossings, attractively land-scaped medians, and an improved signage system to identify the entrances to the nation's capital, adjacent neighborhoods, and nearby tourist attractions and sports facilities, including Kenilworth Aquatic Gardens, RFK Stadium, and Anacostia Park.

Urban Design / Quality of Life

GOAL

Transform Kenilworth Avenue into an urban roadway, more appropriate to its context

OBJECTIVES

- Improve interchange connectivity to neighborhoods at key locations
- Enhance neighborhood identity with a unified system of signage
- Introduce parkway setting or parkway elements to the roadway corridor
- Introduce landscaped medians and shoulders
- Incorporate Low Impact Development into roadway design
- Upgrade streetscape treatment
- Minimize or reduce the roadway footprint

Pedestrian Connectivity

GOAL

Create a safer and more pedestrian-friendly environment

OBJECTIVES

- Upgrade quality of existing pedestrian crossings
- Introduce new crossings over or under Kenilworth Avenue
- Complete or close gaps at missing connections
- Create new connections to destination points
- Add and clearly mark pedestrian crossings
- Add pedestrian-scale lighting where appropriate
- Enhance informational and directional signage
- Add neighborhood identity signage

Public Transit Access

GOAL

Improve access to public transit from both sides of Kenilworth Avenue

OBJECTIVES

- Create safe routes to existing transit stations/stops
- Upgrade quality of existing routes (paving, lighting, signage and landscape treatment)
- Replace or improve existing pedestrian bridges connecting to transit stations/stops
- Enhance transit facilities to accommodate bicyclists

Open Space / Waterfront Connections

GOAL

Strengthen connections to open space and the riverfront

OBJECTIVES

- Upgrade existing, and complete pedestrian paths
- Add way-finding and interpretative signage
- Enhance natural drainage ways between Anacostia Hills and the riverfront
- Enhance park landscape setting south of East Capital Street
- Create new open space when feasible
- Reduce infrastructure footprint

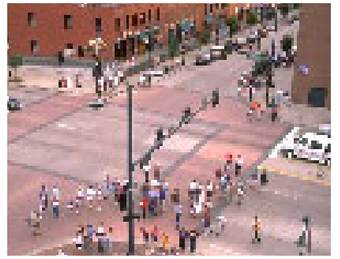
Visual Quality

GOAL

Improve visual quality of Kenilworth Avenue for all users

OBJECTIVES

- Reduce visual clutter throughout the corridor
- Create a parkway setting and landscaping where appropriate
- Upgrade roadway signage
- Introduce a consistent streetscape treatment
- Introduce consistent color scheme for highway elements
- Bury overhead utility lines where possible
- Provide landscaped screening along the CSX railroad and WMATA Metrorail corridors



Safety

GOAL

Improve vehicular and pedestrian safety throughout the corridor.

OBJECTIVES

- Improve functionality of key intersections
- Improve shoulder conditions for emergency stopping and emergency vehicle access
- Improve lighting for vehicles and pedestrians
- Improve functionality of service road on- and off-ramps
- Provide clearly-marked bicycle road facilities
- Improve pedestrian crosswalks with clearly-marked signage and signalization
- Provide traffic calming measures where appropriate

1.4 Study Process

The study was conducted in three sequential phases. The first phase, data collection and analysis, was initiated through an intense community involvement program that reached out to civic associations, Advisory Neighborhood Commissions, and individuals residing in the study area. Resource areas documented included land use and zoning conditions in neighborhoods bordering the corridor, pedestrian movements along and across Kenilworth Avenue, safety and functionality of Kenilworth Avenue, and its connectivity with the regional transportation network. Data from existing sources was supplemented and refined for the study area through site visits, interviews with District officials, pedestrian surveys, and traffic counts. These existing conditions were then analyzed to identify deficiencies in several modes of the transportation system, as well as the physical conditions along the corridor. These are discussed in Chapter 2 of this document.

Following a documentation of key issues, three options for improving the corridor were developed, as follows:

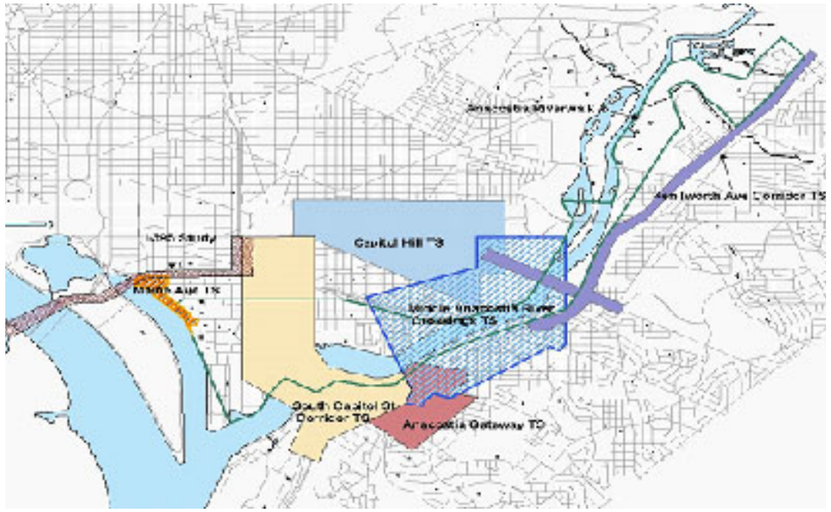
- Transform Kenilworth Avenue into a Boulevard. Integrate the roadway into adjoining neighborhoods, landscape the corridor, and provide at-grade signalized crossings for pedestrians, bicyclists, and vehicles.

- Transform Kenilworth Avenue into a four-lane limited access roadway. Reduce the existing footprint north of East Capitol Street by eliminating one through-lane in each direction; improve safety and functionality of the corridor.

- Improve Kenilworth Avenue. Maintain the existing roadway width while improving safety, infrastructure, and appearance. Depress portions of the corridor to improve connectivity to adjacent neighborhoods.

The preferred alternative is the third option. This option was then developed further to improve connectivity at three major interchanges along Kenilworth Avenue (East Capitol Street, Benning Road, and Eastern Avenue). Computer-modeling analyzed delays, travel times, number of stops, and levels of service (LOS). Travel demand analysis using the Metropolitan Washington Council of Government (MWCOG) regional transportation model was used to project traffic volumes for year 2030 to assess the long-term performance of Kenilworth Avenue under this option. These are discussed in Chapter 3 of this document.

The final phase of the study was to develop broad strategy recommendations and identify individual projects to implement the preferred option. These are discussed in Chapters 4, 5, 6, 7, and 8. Chapter 4 describes the broad corridor-wide strategies, while Chapters 5, 6, 7, and 8 identify the short-term, mid-term, and long-term improvement projects, the timeline for their implementation, and the construction cost estimates.



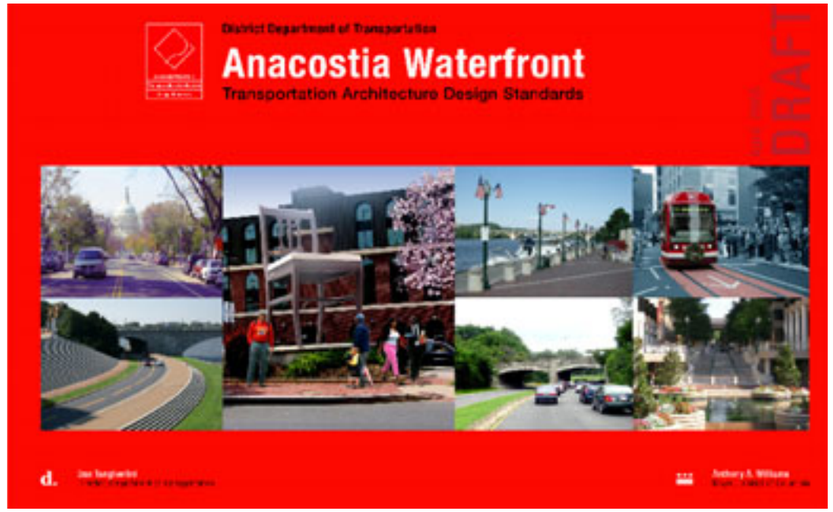


Figure 1.3: DC Department of Transportation Studies

1.5 Other Studies and Projects

Two related studies, the *South Capitol Street and Anacostia Gateway Transportation Study*, and the *Middle Anacostia Crossing Study*, were completed within the past year (the project areas for these two studies are illustrated in Figure 1.3). The *Kenilworth Avenue Corridor Study* builds on the findings of these studies.

Several other important projects and studies that strive to improve the neighborhoods along the Anacostia River also contributed to this study. Each of these studies was coordinated with the current study and their findings will be referenced where appropriate. They include:

Anacostia Riverwalk Trail (ARW Trail)

The ARW Trail will provide a safe and convenient means for visitors to access the Anacostia waterfront and enjoy Anacostia Park. This 16-mile trail will extend from the Potomac River to the Maryland border; a large portion of the trail lies within the study area.

Reconstruction of Kenilworth Avenue, NE from Foote Street to Lane Place

The interchange of Nannie Helen Burroughs Avenue with Kenilworth Avenue is scheduled to be rebuilt in 2006. Improvements include rebuilding the bridge to accommodate a wider Nannie Helen Burroughs Avenue, better pedestrian access, realignment of roads to the west of Kenilworth Avenue to improve safety at difficult intersections near the entrance to the Kenilworth Aquatic Gardens, and street light upgrades between Hayes and Lane Streets.

AWI Transportation Architecture Design Standards

The AWI *Transportation Architecture Design Standards* provide guidelines to unify transportation architecture for roadway and transportation-related construction projects in the Anacostia River area, help preserve and enhance the unique public realm of the Anacostia River area, and integrate the Anacostia River area with the District's monumental and historic character.

The urban design standards provide guidelines for improving pedestrian underpasses and overpasses, lighting, signage, architectural treatment of medians, curbs, gutters, ramps, and bridges, and landscape treatments.

DC Bicycle Master Plan

The goal of the *DC Bicycle Master Plan* is to increase the number of trips made by bicycle by improving bicycling conditions throughout the District of Columbia. The final plan includes a network of bicycle routes, a map showing bike facilities and streets that are suitable for bicycling, bicycle facility design guidelines, and recommended policies for improving the bicycling climate in the District.

Great Streets Initiative

The *Great Streets Initiative* is designed to implement completed and approved plans that comprehensively highlight new opportunities to invest strategically in physical development and public realm improvements along the District's major corridors. Streets within the Kenilworth Avenue Corridor that are part of the Great Streets Initiative include Minnesota Avenue, Benning Road, and Nannie Helen Burroughs Avenue.

Capitol Hill Transportation Study

This study was initiated in response to citizen concerns about the speed and volume of vehicular traffic on streets in the Capitol Hill area. The study examines existing and projected transportation conditions and develops recommendations to enhance mobility, traffic safety, pedestrian safety, and bicycle safety.

Figure 1.4: Public Meetings

Replacement of Kenilworth Avenue Bridge over AMTRAK and Beaver Dam Branch
The Maryland State Highway Administration will advertise a project to reconstruct the Kenilworth Avenue Bridge over AMTRAK and Beaver Dam Branch immediately north of Eastern Avenue. Construction is expected to begin in 2006 and will include replacing the existing bridges and adding an acceleration lane for traffic entering southbound Kenilworth Avenue from eastbound New York Avenue.

Extension of Minnesota Avenue
This project connects the two portions of Minnesota Avenue that terminate at Sheriff Road and Meade Street. There is currently no schedule for construction.

Eastern Avenue Bridge
DDOT is currently investigating how to address the vertical clearance issues at the Eastern Avenue Bridge.

Anacostia Streetcar Project/Transit Alternative Analysis
These initiatives identify transit needs in Anacostia, explore how transit can better serve Anacostia neighborhoods and businesses, and develop a transit system that provides flexible, efficient service while supporting neighborhood economic development initiatives.

Minnesota Avenue Station Access Improvement Study
WMATA completed a study for the Minnesota Avenue Metrorail Station that developed concepts for improving pedestrian access and bus access that would enhance the pedestrian environment while meeting future bus demands.

Combined Sewer System Long-Term Control Plan (LTCP)
The LTCP focuses on controlling Combined Sewer Overflow (CSO) discharges to the area waterways. The LTCP planning effort began in 1998 and a draft of the LTCP was made available to the public and submitted to EPA and the District of Columbia Department of Health in June 2001.

Anacostia Park General Management Plan
This plan will guide management of Anacostia Park, identify future recreational opportunities for visitors, guide rehabilitation and development of facilities, and set the course for protecting and managing the Park's natural and cultural resources.

Reservation 13 Master Plan
The Draft Master Plan for Reservation 13 envisions the Reservation as a beautiful edge to the Hill East neighborhood, linking it to the waterfront and meeting both District-wide and neighborhood needs. The plan combines health, science, recreation, education, civic, and housing uses. A village square, a neighborhood park, and tree-lined streets connect the site to a new waterfront park on the Anacostia River totaling more than 16 acres of new public parkland.

1.6 Public Involvement

Public Involvement Plan
The public outreach effort for this study was designed to reach as many stakeholders as possible. The study was introduced to the community through meetings with the Advisory Neighborhood Commissions (ANCs) and civic associations within the study area prior to a series of public meetings.

A Technical Assistance Group (TAG) was formed, comprised of area residents recognized as leaders within the community through their election to public office (chairpersons of ANCs) or as heads of local civic associations. Beginning with the TAG kickoff meeting held in February 2005, TAG meetings to provide guidance to the study team were held periodically during the planning process, generally two weeks prior to public workshops and corridor-wide meetings.

Meeting dates and times were advertised through newsletters, electronically and regularly mailed informational flyers, and local newspapers. A project website provided comprehensive information including project mapping, technical data, project schedule, contact list, and meeting schedules. It also provided a forum for public comments and questions. The web site was updated regularly.

A newsletter was published prior to each public meeting. The mailing list, which included area residents, Federal and local agency representatives, and neighborhood and civic associations, was updated as the project progressed based on registrants at meetings or on the website. The newsletter advertised upcoming meeting times and locations, and provided advance information to help increase the public's awareness and understanding of the study.

In addition, young adult residents of Ward 7 were trained by the study team and participated as data collectors for the pedestrian and bicycle survey conducted as part of the study. The information gathered from the survey was used in the field analysis that formed recommendations for specific pedestrian and bicycle improvements in the corridor. The survey served as another public involvement tool to gather input from corridor stakeholders who may not have been reached through the other outreach efforts.

Community Meetings
Between November 2004 and January 2005, representatives of the study team visited ANCs within Ward 6 and Ward 7 to introduce the project to the local community and its leaders (ANCs 6B, 7A, 7B, 7C and 7C were visited). In addition, team representatives attended regularly scheduled meetings with the Fort Dupont Civic Association, Kenilworth Resident Council, Eastland Gardens Civic Association, Marshall Heights Community Development Corporation, and the River Terrace Civic Association.

Workshops
Public workshops were held at several locations across the corridor during March 2005. Due to the size of the study area and the diversity of transportation issues, the workshops were held throughout the corridor.

The first workshop was held on March 8, 2005 at Kenilworth Elementary School; the second on March 10, 2005 at the Fort Dupont Ice Arena; and the last one on March 12, 2005 at River Terrace Elementary School. To maximize the number of attendees who could participate, two of the workshops were held during the weekday evenings and one during a Saturday morning. Approximately 60 citizens from most of the study area neighborhoods attended the workshops.

The workshops were designed to familiarize participants with the purpose of the study, its context within the AWI, the existing conditions and issues identified by the design team, and the project goals and objectives. Most importantly, the workshop format was designed to provide a forum for interaction in small groups to solicit the public's concerns and issues and identify possible solutions.

Corridor-Wide Public Meetings
The first corridor-wide public meeting was held on May 5, 2005. At this meeting, three preliminary options for the Kenilworth Avenue corridor, along with options for a Massachusetts Avenue crossing and for Park Road, were presented.

Following the May meeting, the options were further developed based on public comments, engineering parameters, and other data. A second corridor-wide meeting was held on June 21, 2005, where these refined options were presented and discussed.

On June 19, 2006, the Draft Plan was circulated to various agencies, ANCs, and Civic Associations within the study area for comments. On November 4, 2006, a third public meeting to review the proposed recommendations for Kenilworth Avenue was held at River Terrace Elementary School. Approximately 30 citizens attended the meeting. The public meeting was designed to showcase the seventeen projects proposed for the corridor and to elicit feedback from participants through interaction with the study team and through written comments.